

Abstract of the Disclosure

A portable device having an optical engine adapted to form an image from an image source in four different modes to allow a viewer to view the image. The image source is a microdisplay device, which can be reflective, transmissive or emissive. The display modes include a near-eye display (NED) mode, a near projection display (NPD) mode, a Window mode that provides a virtual image to a viewer at a distance, and a projection display mode that projects an image on a surface at a distance. The portable device has an internal light source to provide illumination to the image source for the first three modes. The portable device is further adapted to receive the light output from an external light source for use with the fourth mode.

TO 2024-07-04